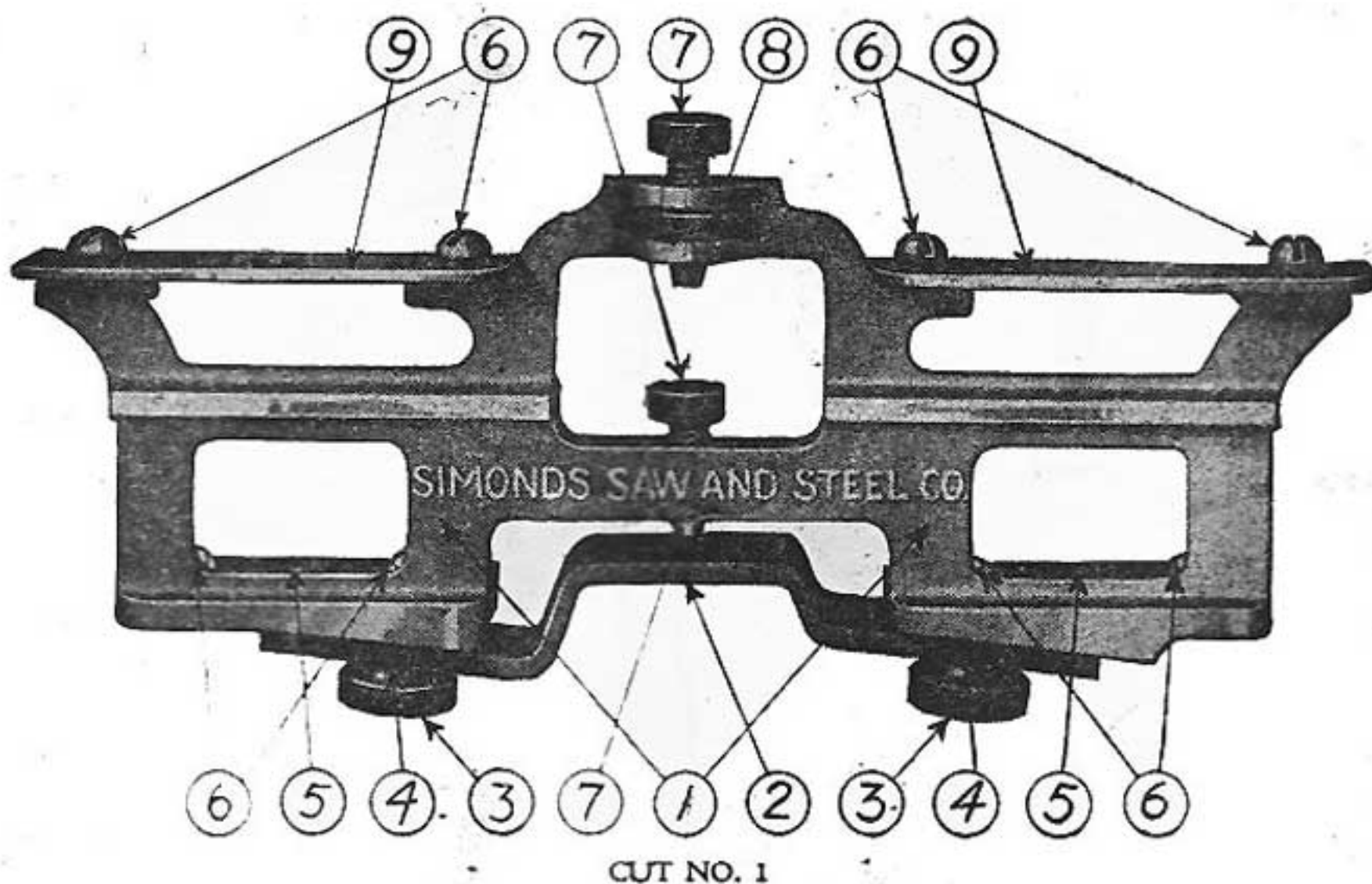


Instructions for the use of

Simonds Precision Cross-cut Saw Tools, No. 342

PATENTED APRIL 10, 1917



Advantages of the Simonds Precision Cross-cut Saw Tool

Quick, accurate, and rigid adjustment of Raker Gauge.

No chance to dislocate slide when once set in position—a feature
not to be found in any other saw tool on the market.

Easy and rigid adjustment of jointing file. File is held square with the body of the saw.

Depth of raker tooth can be easily and accurately varied from 1-16 of an inch to 1-1000th of an inch, *the slide being held firmly in all positions.*

Hardened steel plates and screws are furnished throughout on all wearing surfaces. This prevents the fine adjustment of the tool becoming altered owing to wear when in use.

All parts of this tool are interchangeable.

In case of breakage or loss, parts may be obtained from our agents, branch houses, or factories.

When ordering separate parts please give the name and the number of the part required, the number of parts wanted, and enclose the necessary price as per list below.

List of Parts.

Part No.	Name	Number on Each Tool	Postpaid Price Each
1	Frame	1	\$1.15
2	Filing Rack	1	.55
3	Filing Rack Screw	2	.12
4	Filing Rack Screw Washer	2	.06
5	Filing Rack Guide Plate	2	.12
6	Screws for Plates 5 and 9	8	.06
7	Gauge Screw	2	.12
8	Gauge Screw Lock Nut	1	.12
9	Gauge Screw Guide Plates	2	.12

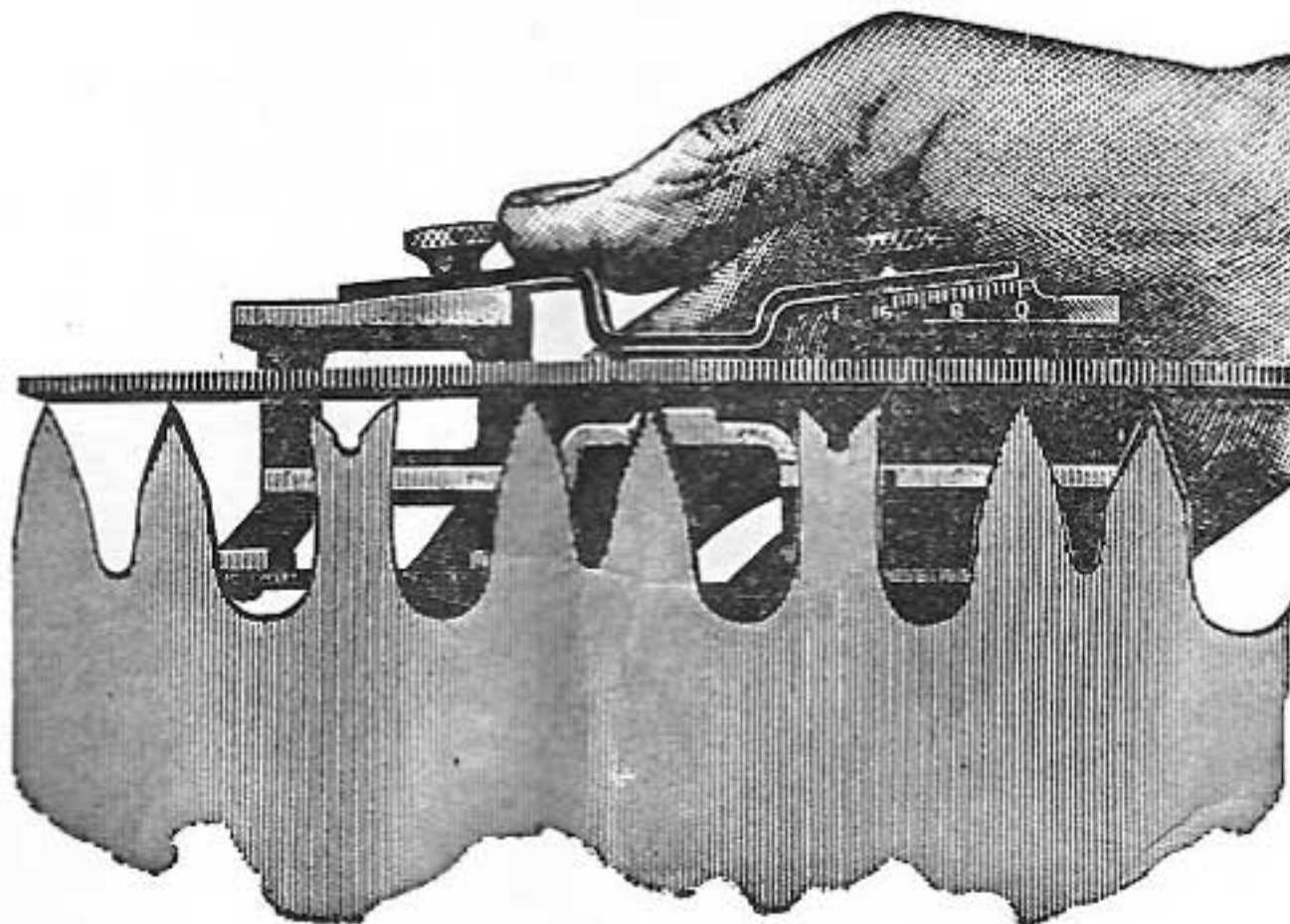
FIRST: JOINTING.

In jointing the saw, place an 8-inch Simonds Special Cross-cut Saw File in the tool under the filing rack against the lugs at each end. Then tighten the screw beneath the file until it gives the file the necessary curve to follow the toothed edge of the saw being fitted up. If the file is properly placed, as described above, it will have

an even curve, and will set square with the body of saw, and when run over the tops of cutting teeth will joint or breast them evenly. Again it will not be necessary to change the tool from one side of saw to the other, *as is the case with other makes of saw-jointing tools.*

SECOND: FILING RAKER OR CLEANER TEETH.

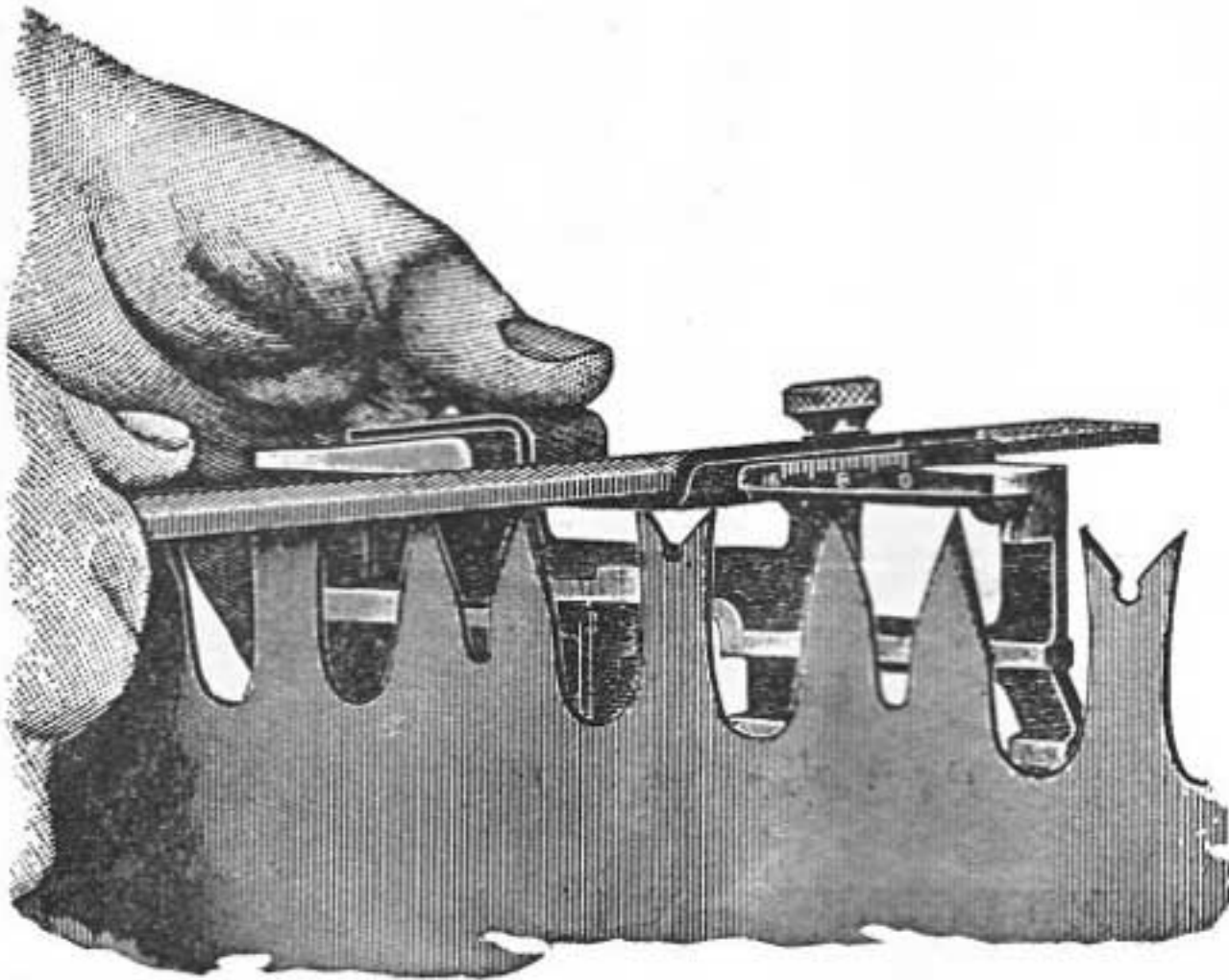
Note the figures and scale on the side of the tool next to the filing rack. When the filing rack is set so that the notch on the side is in line with the 0 on the scale the rakers will be filed in line with the cutting teeth. Each division on the scale is four thousandths of an inch.



CUT NO. 2

If it is desired to have the rakers $1/64$ inch lower than the points of the cutting teeth, place the notch on the filing rack half way between the 0 and the 8 on the scale. Placing the notch on the filing rack in line with the 8 permits filing rakers $1/32$ inch below cutting teeth. If $3/64$ inch is desired, the notch is placed on 12 of the scale (half way between 8 and 16); for $1/16$ inch, line the notch with the figure 16 on the scale.

All guesswork is eliminated. Simply adjust the filing rack to give the desired amount, tighten set screws and then file points even with hardened surface of filing rack. This is a valuable feature saving time in fitting up a saw and it is found exclusively in this tool.



CUT NO. 3

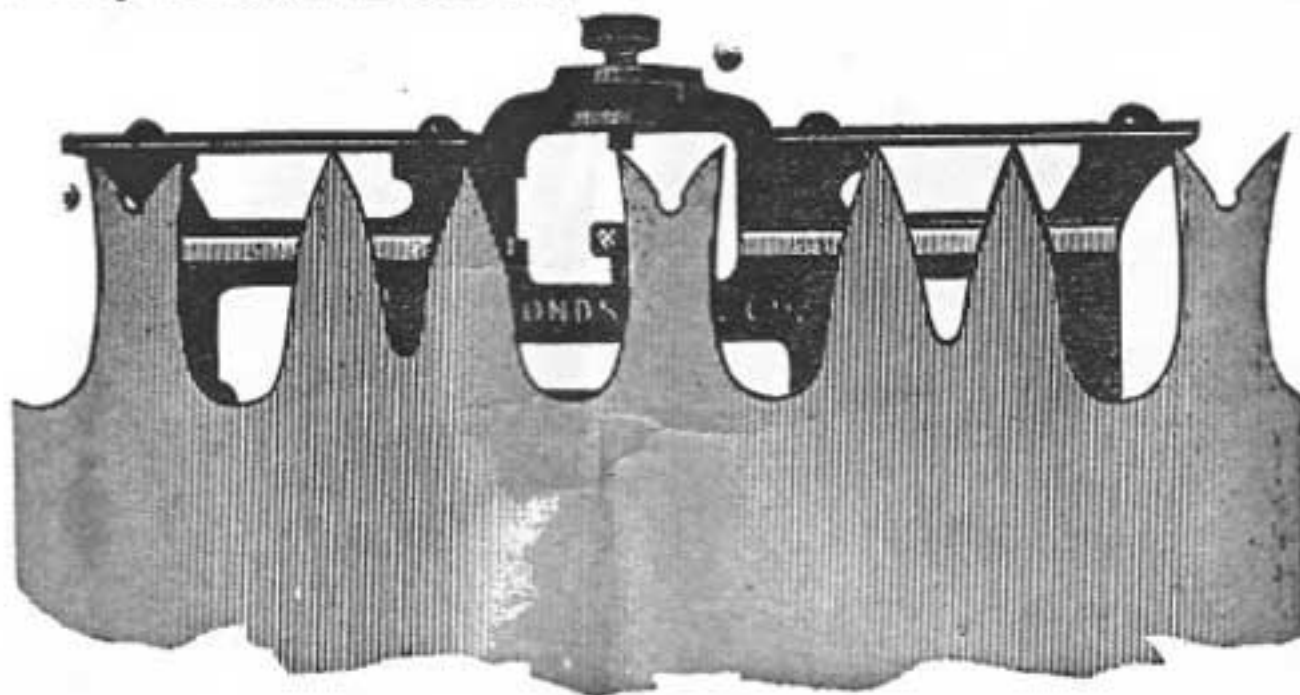
THIRD: GAUGING THE RAKER TEETH.

Another added feature of the Precision Cross-cut Saw Tool is the graduations on the body of the casting below the gauge screw. Each division is four thousandths. Set the gauge screw approximately in line with the guide plates and have the notch on the gauge screw in line with the 0 on the scale below. This brings the rakers and cutting teeth to a uniform height. By moving the gauge screw four divisions in a clockwise direction the operator is sure of gauging $1/64$ inch below guide plates. If gauge screw is moved 8 divisions or one complete turn of screw $1/32$ inch below guide plates.

If it is desired to put $\frac{3}{64}$ inch distance below guide plates, another four divisions in a clockwise direction gives this setting. If $\frac{1}{16}$ is wanted, two complete turns of the screw gives this result.

This is a very valuable feature, as you can test out rakers and make certain they are the exact height wanted and for use when swaging raker teeth with hammer.

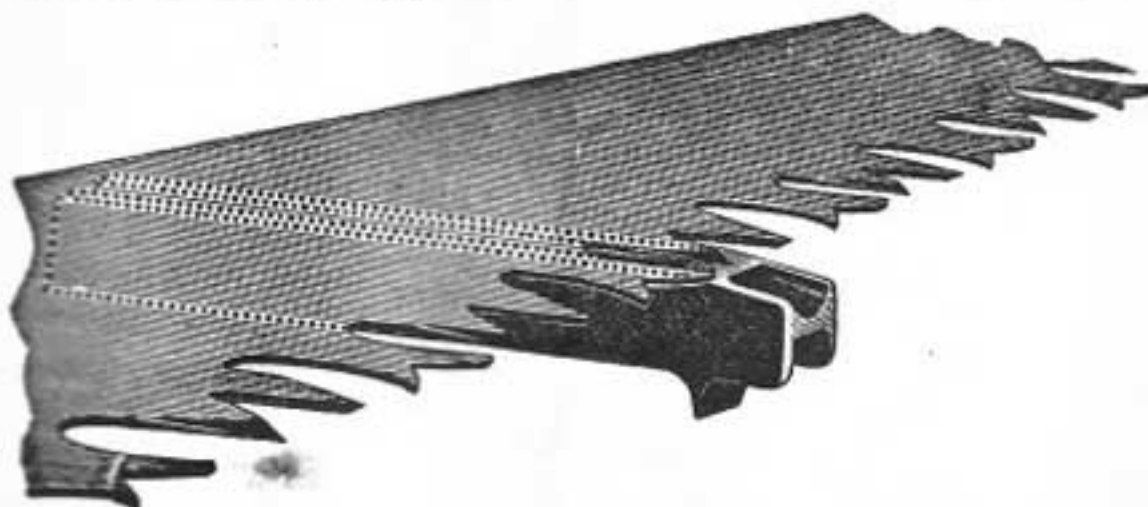
The view of the gauge screw is unobstructed by any part of the tool as may be seen in cut No. 4.



CUT NO. 4

FOURTH: SETTING THE TEETH.

For setting the teeth, the setting stake is placed on a log or any convenient block, and wedge firmly driven in. to keep stake in a firm



CUT NO. 5

position. The body of saw is then laid on the long side of stake with the points of cutting teeth projecting over the beveled part of stake a sufficient amount to give the tooth the proper set when struck down by a light hammer with two or three blows.

FIFTH: REGULATING THE SET.

In using the set gauge, take gauge in left hand, with saw running under left arm, as shown in cut No. 6. Now hold spring-set in right hand, placing slot over tooth, as shown in cut No. 7. If tooth has too little set, spring tooth from you, with setting hammer, being sure that the point of the tooth projects into clearance hole at bottom of slot in hammer head. If the tooth has too much set, reverse the operation.



CUT NO. 6

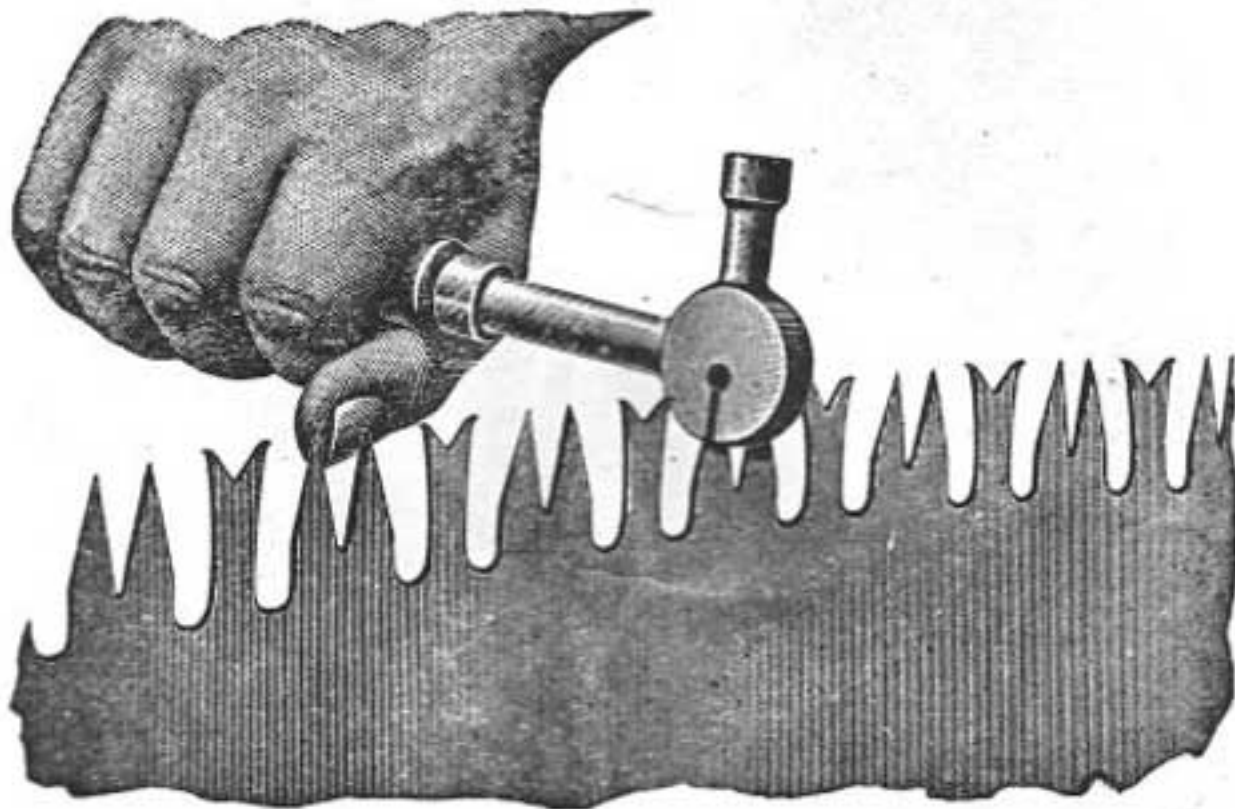
If the amount of set on gauge is not what is wanted, this can be quickly made anything desired by filing one or the other of the working points. Use the spring-set as little as possible to get proper set of teeth, depending on the setting-stake for doing the most of this work. The spring-set is only used to correct the work coming from the "stake."

Advantages of the Simonds Set Gauge.

(See Cut No. 6)

So shaped as to prevent cramping of fingers while using.

It will be noticed that three points of gauge on one end are nearer together than on the other. This allows the filing to different lengths of the setting points, so that if gauge is held against the saw with long end down, and the three lower points resting on saw, a certain set is obtained at the top point. By reversing gauge, letting long end be at top, a different set is obtained. The amount of this set can be varied to suit any filer's taste.

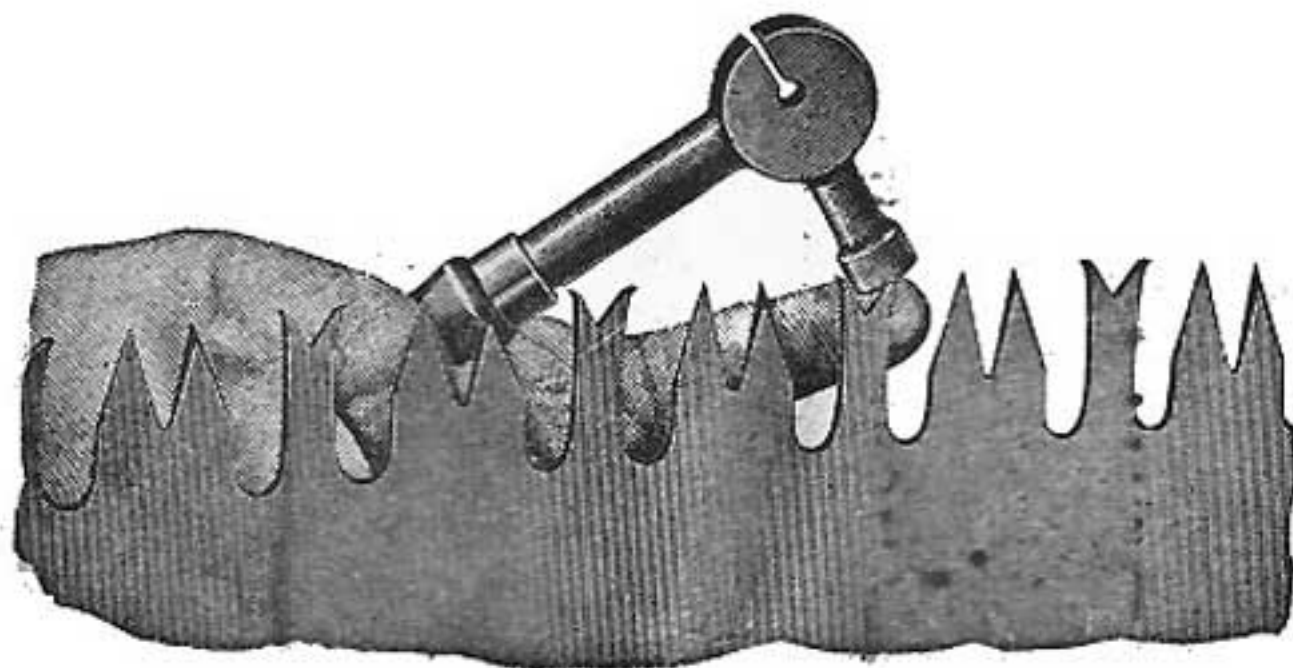


CUT NO. 7

SIXTH : SWAGING RAKER TEETH.

In doing this, the swaging hammer is held as shown in cut No. 8, with finger resting on the tooth to feel the amount of hook made when tooth is tapped with hammer.

The shape of raker point after swaging in this manner is shown in the several cuts.



CUT NO. 8

Advantages of the Simonds Swaging Hammer.

(See Cuts Nos. 7 and 8)

The wide jaws of setting slot prevent injury to tooth.
The perfect balancing of Hammer as regards the body.
Easy to handle.

SIMONDS SETTING HAMMER for CROSS-CUT SAWS



No. 337

Drop Forged Tool Steel.
Carefully made.
Accurately balanced.

SIMONDS SPECIAL CROSS CUT SAW FILE



with the
RED TANG

Nearly 50% better for Cross-cut Saw filing than the ordinary Mill File
because you can use both halves of both sides.

SIMONDS SAW AND STEEL CO.

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